OMB No. 3137-0035 expires 12/31/2000

LL-90136 University of Missouri

# Face Sheet

1. Applicant The Curators of the University of Misso	uri Bı	ryce Allen,	Principal Investigator
2 Applicant's Mailing Address SISLT, University of Missouri-Columbia,	20 Rothwell (	Gym	÷
3. City Columbia	4	. State MO	5. Zip Code 65211
6. Name and Title of Authorizing Official	7.	Business Pho	one of Authorizing Official
8. Name of Project Director	9.	Business Ph	one of Project Director
Bryce L. Allen		(573) 882-	9545
10. FAX Number of Applicant	11.	e-mail addre	ess of Project Director
[573] 884=4944		isbryce@s	howme.missouri.edu
12. Sponsoring institution/parent organization, if a check if this entity will manage funds if an award			nte, or university)
The Curators of the University of Misso			
310 Jesse Hall, Columbia, MO 652 13. Governing control of applicant 2 (turn page	for selections)	* if 6, please	specify
14. Type of organization 13 (turn page for selection)	select only one	* if 14, please	specify
15. Employer identification number 43-600385	9 84		
16. Type of project (turn page for selections)	lect only one		
17. Use of technology: x check box if application prop	ooses the use of hardwar	e and/or software	as a significant aspect of the project.
18. GRANT AMOUNT REQUESTED \$_127,61	<u>00</u> <b>19</b> . Amoi	ant of Matchin	g Funds \$ 96,066 .00
20. Grant Period (Starting Date) 10 /	01 / 99	09 /30 /	01 (Ending Date)
21. Identify other Federal agencies that either have c of these project activities and indicate the amount of	ontributed suppor support contribu	rt or have a pe ted or request	nding proposal for support ed.
Name of Agency	Contributed/P	ending	Amount
N/A			
22. In the space below, include the names of any org	anizations that ar	e official parti	ners of the project.
23. Certification: Office of Sponsored Progr			d17/99
Signature of Authorizing Of	ficial	•	Date

PROPOSAL NO.: JH 9914863-1

# The Public Services Librarian in the Electronic Age: An Education and Training Proposal

#### Abstract

This project will train librarians to mediate between information content and users in a distributed, asynchronous information environment. In traditional library work, reference transactions and most types of training have occurred in a face-to-face interaction. As networked digital resources become available to library users, they have fewer opportunities to interact with librarians in this traditional way. Rather, they contact librarians for assistance and instruction using, electronic messages. The library public services are provided using the same asynchronous communications.

Providing intermediation and instruction in the electronic setting is different from service provision in the traditional setting. This education and training program will provide librarians with the knowledge and skills they need to interact with users in this new environment. Two courses will be developed and taught to library school students: "Electronic Communication and Mediation" and "Distance Education for Information Users." These courses will then be reconfigured to meet the needs of practicing librarians for continuing education in these topics. Careful evaluation of the courses and their impact on professional practice is included in the plan.

The initial focus of this education and training is on the Public Library community. Here, the opportunities for interaction with remote patrons are substantial, and the need for training is equally large. Expansion of the target audience to include professionals from other settings will occur after the training has been developed, evaluated, and proven to work with public librarians. The expansion of the initial target market to include a nation-wide audience will also occur in this expansion stage. It is anticipated that the ongoing program of academic (library school) and continuing (professional) education will become self-supporting after the initial development period supported by this grant.

# The Public Services Librarian in the Electronic Age: An Education and Training Proposal

# 1. Overview

This project will train librarians to mediate between information content and users in a distributed, asynchronous information environment.

# 1.1. Background

The mediation role of librarians typically involves two parallel activities. The first is communicating with users about their information needs and desires to help users find the information they need or want. This mediation ranges from provision of expert assistance in elaborate searches for information to providing fast answers to simple questions. The second is instructing users to develop the skills they need to find, evaluate, and use information. In public libraries, these two types of mediation are separable, and occur in different settings.

Traditionally, however, both of these types of interaction between librarians and patrons have occurred during face-to-face interaction. Users approach librarians in the library for assistance with their information searches, or for answers to questions. Through the process of the reference interaction, including the reference interview, librarians assist users to meet their needs. Typical approaches to instruction have included face-to-face interaction between librarians and users in group instruction settings. Interestingly, it has been found that those users who wish to be instructed in information skills are frequently willing to pay for that instruction. The development of networked digital information resources has presented alternatives to users that they can use without being in the library. As a result, the opportunities for the traditional type of mediation (i.e. face-to-face interaction) have been reduced. At the same time, the need for mediation has increased as networked digital information resources have proliferated. The worldwide web is just one example of the amount of electronic information available to individuals. But, the tools used for finding information on the web vary considerably, and do not always produce satisfactory search results. There is, accordingly, an increased need for mediation by highly trained information specialists both to assist users in finding information and to teach them how to make optimal use of this distributed electronic information environment.

The public library is one setting in which this need is most acutely felt. In academic and school libraries, some level of management of students can be exercised to ensure that they use traditional librarian mediation. For example, library instruction classes can be required. But the clientele of the public library is not subject to library patron management in this way. At the same time, public library users have information needs that span a wide range of interests. New and complex information resources, particularly those on the WWW, address many of these areas of interest. Many public libraries are facilitating patron access to such resources by negotiating licenses with companies who make information available on the web. As a result, the need for librarian mediation is increased.

In summary, library users no longer have to be physically present in the library to make use of some library resources (and other networked digital information resources) in their searches for information. This means that they no longer have the same access to traditional librarian assistance and instruction.

The challenge is to enable librarians to mediate in this new distributed, asynchronous information environment.

# 1.2. The Education and Training Plan

It is assumed that all librarians and LIS students are familiar with the wide range of networked digital information resources. In the School of Information Science and Learning Technologies, this content forms a major part of two required courses (Managing Collections and Access, and Reference Sources and Services) and in several elective courses (Networks and Telecommunications, Automated Reference, Using the Internet for Reference). This proposal does not seek to train librarians in access to, finding, or using electronic information resources. We believe that adequate training programs are already in place to handle this (sometimes daunting) challenge. What is proposed here is a different kind of training, focusing on how librarians can interact effectively with patrons whom they may never see face-to-face.

Essential to effective intermediation in the electronic environment is an understanding of the social and psychological realities of communicating using asynchronous electronic means. A variety of recent research findings point out that communities of discourse that evolve in use groups, chat rooms, and email conversations are distinctly different from communities of discourse that are based on other communications technologies (Jones, 1995, 1997). Electronic communities, dubbed "cybersociety" by Jones and his colleagues, present new challenges and opportunities for group activity. Leadership is exercised differently. Discipline within the communities is enforced through subtle means (and sometimes by overt coercion). The social networks that develop frequently include a core of frequent participants, accompanied by a penumbra of hangers-on or lurkers.

Equally important is the psychological side of electronic communication. Experience with web-mediated instruction suggests that individuals who choose to participate in electronic communication are frequently those who would not choose to communicate actively through other media. The emotional content of electronic communication is different in important ways from face-to-face communication. Phenomena such as "flaming" occur that would not occur in the same way in more traditional communication forums.

We propose an instructional and training program that will focus on the implications of this research for librarian mediation in the asynchronous electronic communications setting. The skills of the reference interview, developed with the face-to-face encounter in mind, must be refined and altered to fit the electronic communication environment. The nature of the interaction between digital librarians and electronic patrons must be explored. To this end, we propose the first of our content areas in this education and training plan: Electronic Communication and Mediation. A sample course outline for this content area is provided in Appendix 1.

Asynchronous education through web-based courses is an important addition to the distance education techniques available to schools and universities (Cyrs, Menges, & Svinicki, 1997). A wide variety of course offerings are available to students who may be located anywhere in cyberspace. In library instruction, however, only the first tentative steps towards using this distance education technology have been taken. As a result, there is a great deal that librarians can learn about mounting and teaching web-based courses that will instruct users in how to find, evaluate, and use information. To this end,

we propose the second of course content areas in this education and training plan: Distance Education for Information Users. See Appendix 2 for a sample course outline for this content area.

We propose a phased development of this content. In the first phase (year one of this grant proposal), we will develop two courses to be taught to students of the School of Information Science and Learning Technologies. The first will focus on communication and intermediation in the electronic environment, and the second will focus on instruction for information users in the electronic environment. We will develop these courses to be offered as web-based courses, thus reinforcing students' knowledge of and experience with electronic technologies and information resources.

The second phase (the second year of this grant proposal) will adapt this content for the continuing and professional education of practicing librarians. Again, the content will be made available as web-based instruction, and will be offered primarily to public librarians in the State of Missouri, through cooperation with the St. Louis and Kansas City Public Libraries, and with the Missouri State Library.

The third phase (not funded by this proposal) will expand the cooperative arrangements employed in the second year to make this content available to librarians in other types of libraries, and on a nationwide basis.

### 2. Evaluation Criteria

# 2. 1. National Impact

When librarians are trained in mediation and instruction in the asynchronous distributed environment, they can become important resources in helping people find the information they need on the internet. The availability of networked electronic information resources is not just a national phenomenon, but rather is international in scope. To the extent to which every resident of this country has access to the internet, he or she needs some level of training and assistance to find, evaluate, and use the information accessible through the internet. In almost every community in the country there are trained information specialists whose specialized knowledge and experience qualifies them to provide this training and assistance. The challenge is to link information users with information specialists in this networked electronic environment. First steps towards this linkage are visible. "Ask a librarian" links are found on many library web sites. The St. Louis Public Library, for example, has had email, and now web-based, reference service since 1991. However, if librarians are to play an active role in the information activities of the members of their user communities, they must provide assistance and training in a more visible and aggressive manner. The training program we have developed provides them with some of the tools they need to reinvent librarian mediation in the electronic setting. As this training is made available to both library school students and librarians nation-wide through our webbased course offerings, the School of Information Science and Learning Technologies will be able to assume a leading role in preparing information specialists for asynchronous mediation.

# 2.2. Adaptability

By focusing on public libraries in the development of our education and training program, this proposal has ensured that the training will be adaptable to other environments. As indicated above, public librarians experience the most acute need for this kind of training. As a result, the content that

we develop will be thorough and complete enough that it can be adapted easily to other types of libraries. This process of adaptation will require that the different individual, group, social, and organizational factors that influence information behaviors in information contexts other than public libraries be understood and incorporated into the content of the training. At the same time, it is recognized that other institutions besides libraries have been experiencing the impact of the revolution in information technology. Art galleries and museums, for example, are increasingly mounting digital exhibitions. For these institutions, fulfilling their instructional role may well require a foundation of knowledge in communications and instruction in asynchronous electronic environments. Accordingly, we anticipate a broad and sustained demand for the training program proposed here.

# 2.3. Design

The goal of this project is to develop a training program that will give library school students and librarians the knowledge they need to participate effectively in electronic mediation communication with and training of individuals who need information. This goal gives rise to several objectives.

*Comments*: The design of this project is simple, and easily represented by six objectives (see below). The resources sought in this grant proposal will complement existing resources and expertise to ensure that these objectives are attained.

**Objective 1**: Within the first 3 months of the project, to develop and make available two web-based courses: "Electronic Communication and Mediation" and "Distance Education for Information Users."

Comments: The School of Information Science and Learning Technologies has substantial experience in creating web-based courses, and in successfully teaching them to library school students as well as students who are studying Educational Technology. In cooperation with the Distance Learning Design Center of the University of Missouri and the Continuing and Professional Education Division of the College of Education, the School has presented as many as seven web-based courses per semester, covering a wide range of topics. The School possesses the educational design and telecommunications expertise needed to meet this objective in a timely manner. The grant will enable faculty resources to be focused on this educational objective.

**Objective 2**: Within the first 9 months of this project, to offer the two web-based courses to a minimum of 20 library school students (each).

Comments: Demand for coursework delivered through the Internet remains high, as long as the coursework is professionally relevant and personally satisfying. As outlined above, the content of these two courses is essential for librarians and other information specialists as they expand their roles into the electronic environment. We anticipate that the initial offerings of these two courses will generate more than enough demand to allow us to meet this objective. We also anticipate that this initial offering of the two courses will be followed by incorporating the courses as electives within our program, to be offered on an annual basis.

**Objective 3**: Within the first 12 months of this project, to configure the two web-based courses into six modules suitable for continuing education of librarians.

Comments: To accomplish this objective, the School will work closely with two major public libraries from the State of Missouri: the Kansas City and St. Louis Public Libraries. With the assistance of these institutions, we will subdivide the content into modules, and (based on the experience of teaching the courses to library school students) refine the content for public librarians and other information professionals. The teaching experience of the faculty of the School, and the professional experience of librarians from major public libraries will allow this objective to be realized.

**Objective 4**: Within the first 24 months of the project, to offer this content to a total of 120 librarians from the State of Missouri.

*Comments*: The anticipated need for this content will be documented and tested with the assistance of the Missouri State Library. We anticipate that 20 students will be enrolled in each of the modules during the first, experimental offering of these modules. With the active assistance of major public libraries, this objective should be realized with few difficulties.

**Objective 5**: Within the first 12 months following the completion of the project, to seek cooperative arrangements with additional libraries and consortia to offer the continuing education courses to new markets.

*Comments*: Once the costly and difficult work of design and initial teaching of this content has been completed, the courses will become self-sustaining as continuing education offerings. The only challenges that remain are to adapt the content to new audiences, and to market the courses actively to other library systems, consortia, and universities.

**Objective 6**: To complete a thorough evaluation of both the library school and continuing education courses within the first 24 months of the project.

Comments: See the evaluation plan, worked out in detail below.

### 2.4. Management Plan

The applicants for this grant are located within a School of Information Science and Learning Technologies, which has an annual budget of more than \$3.5 million. This School is situated within a College of Education, which has its own financial management system to control an annual grant budget in excess of \$14 million. Further, the College is part of the University of Missouri at Columbia, which handles grant expenditures each year in excess of \$89 million. Clearly, the managerial infrastructure is in place to ensure that this project is managed in an efficient manner. However, to ensure that these managerial resources can be deployed, this proposal includes a request for \$6400 in funds for project management. These funds will be used to ensure that existing managerial systems can be employed, and supplemented where necessary, to complete the project.

The management structure anticipated for this project is as follows. The Director of the School of Information Science and Learning Technologies will be in overall management control.

Course content and teaching will be assigned to faculty members from the School. Preparation and maintenance of the web-based course content will be the responsibility of a project manager, assisted by programmers. The faculty who will develop and teach the content will be the primary links to the public library community.

## 2.5. Budget

The budget for this project is just over \$223,000 over two years. The rationale for this budget is presented in the budget narrative. The School of Information Science and Learning Technologies regards this budget as carefully constructed and balanced. Over 60% of the direct costs of this budget is devoted to personnel costs, so central to the development and teaching of the training program. A further 25% is in direct student support.

To this budget the School of Information Science and Learning Technologies is committing over \$70,000 of internal funds as institutional match. This amount demonstrates the dedication of the institution to the concept of training libraries to perform some of their most important functions in new environments. We believe that the nation-wide impact of the training program will provide significant returns on this investment in future years.

#### 2.6. Personnel

The project director for this project is Dr. Bryce L. Allen. His research into information needs and cognitive structures of library users led him to suggest a framework for intermediation called "structural questions" (Allen, 1988). Further work on the cognitive aspects of the interaction between librarians and users led to the development of the "partnership model" (Allen, 1996). With over 25 years of practical and research experience in intermediation, Dr. Allen is qualified to develop and teach the proposed course on Electronic Communication and Mediation. Dr. Allen was also one of the first to teach librarians on the web. As a member of the faculty at the University of Illinois, he participated in the development and teaching of the LEEP 3 web-based master's program. At the University of Missouri, he has continued to be involved in distance education using a variety of technologies, including internet and two-way video conferencing. The budget for this project includes 25% release time over two years to direct and help create the educational content of the training program.

Dr. Gillian Allen will be the second major contributor to this project. With a background that includes education, librarianship, and labor-management relations, Dr. Allen has participated extensively in developing internet-based courses at the University of Missouri. She has developed, and is currently teaching, the Bibliographic Instruction course, which uses a combination of internet and classroom instruction. She also teaches Management of Information Agencies on the web, and is developing the Public Libraries course for internet-based teaching in the next academic year. The budget for this project includes 25% release time over two years to create and teach the educational content of the training program.

### 2.7. Evaluation

The evaluation of this project is in two parts. The first is the evaluation of the effectiveness of the web-based instruction of library school students and librarians. This will be accomplished by three parallel measures. Students will complete course evaluation forms after every course. They will also participate in focus groups midway through each course. Finally, faculty members who are teaching the courses will provide reflective assessments of the course from their own perspective. It should be noted that this first level of evaluation applies equally to the full-semester courses for library school students and the short courses for the continuing education of practicing professionals.

The second part of this evaluation is the assessment of the impact of these programs on the professional activities of the professionals who have received the training. In this evaluation, public libraries will play an invaluable role. By incorporating evaluations of the intermediation activities of their librarians in annual performance appraisals, as well as by ad hoc evaluations of asynchronous library instruction programs mounted by these professionals, public libraries will provide a longitudinal assessment of the effectiveness of the education and training program.

This evaluation plan will follow students through four stages of their learning: acceptance, learning, action, and impact. Acceptance of the basic conceptual framework of the course content is assessed through assignments completed by students. Learning of the knowledge and skills taught will be assessed through the course evaluations and focus groups. Actions taken by students will be assessed through annual evaluations provided by employers. The impact of those actions will be assessed by the longitudinal assessment accomplished in cooperation with employers.

### 2.8. Dissemination

As academics whose careers depend on publication, the applicants share the interest of the Institute in ensuring thorough and expeditious dissemination of the results of this project. Further, as participants in multiple research communities, we have ample opportunities to communicate these results. The following national conferences are viewed as likely venues for dissemination: The Association for Library and Information Science Education, the American Society for Information Science, and the American Educational Research Association. These organizations all support journals that provide an opportunity for written dissemination of results.

Finally, recognizing the impact of electronic dissemination of research findings on research communities, we propose establishing a web site for this project as a section of the School's web site (http://www.coe.missouri.edu/~sislt.)

Perhaps the most important aspect of dissemination, however, is the dissemination of the training program that is anticipated for the years following the completion of the initial, grant-funded stage. The School of Information Science and Learning Technologies is part of a network of over fifty accredited graduate programs, many of which have distance education programs in place. Through cooperation with these institutions, and with library networks and consortia, we will disseminate the education and training program on a nation-wide basis.

#### 2.9. Contributions

The contributions of time and resources to this project by the School of Information Science and Learning Technologies are outlined in the budget. The majority of the effort required to make this project a success will be supported by the grant, and by these School resources. The contributions of cooperating institutions must not be minimized, however. The interest of the St. Louis and Kansas City Public Libraries, and of the State Library of Missouri, has helped to make this grant application more concrete and focused. The continued involvement of these cooperating institutions will be central to the development of the courses, and particularly to the evaluation of the impact of this educational plan on librarians.

# 2.10. Sustainability

As indicated above, the developmental stage of this project is anticipated to last two years. At the end of that period (and at the expiration of the grant funding) the education and training program will have to be self-sustaining. This will be accomplished by locating the program (for the purposes of administration) within the Continuing and Professional Education division of the College of Education. This division regularly offers web-based courses for academic credit to students who are located beyond the campus of the University of Missouri. In doing so, it has developed a management infrastructure and marketing and pricing mechanisms that ensure that these courses are offered on a sustained basis. The revenues generated by these courses will be used to offset the costs of offering them, and of the continued development and refinement of the content.

# 2.11. Technical Knowledge

Within the University of Missouri, the College of Education, and the School of Information Science and Learning Technologies, technologies for delivering educational content to remote students using both synchronous and asynchronous technologies are under continuing development. Early web-based courses were largely text-based, but more innovative uses of sound, video, and interactive applets are now being used to enhance the quality of instruction. The School is taking a leading role in the State of Missouri in making courses, and entire programs of study, accessible to students in a distance-independent manner. Examples of courses currently being offered may be viewed at:http://muextension.missouri.edu/dldc/Q450 and http://muextension.missouri.edu/dldc/Q410.

## 2.12. Information Access

Because this project is designed to be sustainable beyond the life of the initial grant, access to the education and training content must be ongoing, and indeed enhanced over time. Because of the plan for longitudinal evaluation, and the development of a web site to report on this and other aspects of the project, the project will remain visible, and its results available, to the library and museum community.

#### References

Allen, B. L. (1988). Text structure and the user-intermediary interaction. RQ, 27, 535-541.

Allen, B. L. (1996). <u>Information tasks</u>: An approach to user-centered information system design--San Diego: Academic Press.

Cyrs, T. E., Menges, R. J., & Svinicki, M. D. (1997). Teaching and learning at a distance: What it takes to effectively design, deliver and evaluate programs. San Francisco: Jossey-Bass.

Jones, S. G. (1995). <u>Cybersociety: Computer-mediated communication and community</u>. Thousand Oaks, CA: Sage.

Jones, S. G. (1997). Virtual culture: Identify and communication in cybersociety. London: Sage.

# Appendix 1: Course Outline: Electronic Communication and Mediation

The Asynchronous Communication Environment

Software for asynchronous communication

The nature of asynchronous communication

Communication in the asynchronous environment

Mediation in an asynchronous setting

# The Synchronous Communication Environment

Software for synchronous communication (chat, MUD, MOO)

The nature of synchronous distributed communities

Communication in the chat room

Mediation in the chat environment

Integration: Computer-supported cooperative work

**CSCW** software

The nature of distributed work

The nature of distributed communities

Communication in CSCW

Mediation and gatekeeping in CSCW

Development: The digital librarian

The functions of "ask-a" lines

Distance mediation using audio-video links

The public librarian as webmaster

The public librarian as web assistant

# Appendix 2: Course Outline: Distance Education for Information Users

Developing Distance Education: Learning Theory

Cooperative/Collaborative Learning

Active Learning

Resource-based Learning

Constructivist Learning Paradigms

# Developing Distance Education: Technical Issues

Hardware/software issues for web-based learning

Audio/video links and their integration with the WWW

Provision of technical support for remote learners

Resource provision for remote learners

### Distance Education Models for User Instruction

On-demand instruction

Modular courses

Individualized instruction

# **Preparing Instructional Content**

Course structure

Communication and collaboration

Assignments and Grading

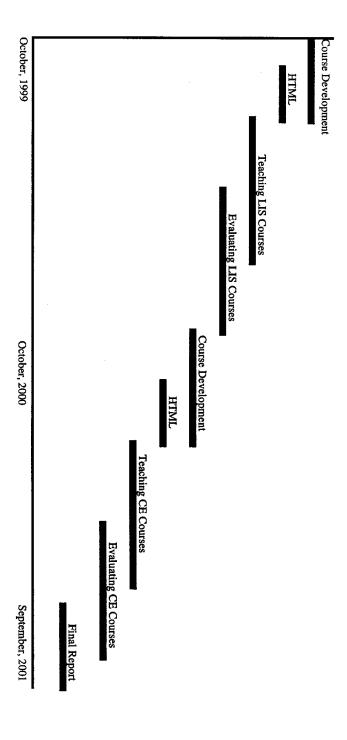
# **Evaluating Instruction**

Course evaluation

Impact assessment

Practicum: Preparation and presentation of an instructional program

The Public Services Librarian in the Electronic Age: An Education and Training Proposal



# Project Budget Form Front SECTION 1: DETAILED BUDGET

Year 1 Name of Applicant The Curators of the University of Missouri School of Information Science and Learning Technologies

IMPORTANT! READ INSTRUCTIONS ON PAGE 5.2 BEFORE PROCEEDING.

### SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	No. METHOD OF COST COMPUTATION	IMLS	Матон	TOTAL
		*1		
	TOTAL SALARIES AND WAGES	\$ 12,833	15,500	28,333
SALARIES AND WAGES (	TEMPORARY STAFF HIRED FOR	PROJECT)		
Name/Trne Computer Technician	O. METHOD OF COST COMPUTATION 1 50% of 12 month appt.	IMLS 5,200	MATCH 5,200	TOTAL 10,400
Grad Res Assistant				4,376
	TOTAL SALARIES AND WAGES	<b>9,</b> 576	5,200	14,776
FRINGE BENEFITS				
RATE	SALARY BASE	IMLS	Матон	TOTAL
	TOTAL FRINGE BENEFITS	<b>s</b> 7,034	4,291	11,325
CONSULTANT FEES	N C			
NAME/TYPE OF CONSULTANT N/A	RATE OF COMPENSATION NO. OF DAYS (OR (DAILY OR HOURLY) Has) ON PROJEC	IMLS	Матон	TOTAL
			=	
	TOTAL CONSULTATION FEES	•		
TRAVIL NUMBER	OF: SUBSISTENCE TRANSPORTATI	ION		
FROM/TO PERSONS Columbia/St.Louis/2) Columbia/KC,MO (2)		IMLS 932 932	Матсн	932 932
()	TOTAL TRAVEL COSTS	<b>5</b> 1,864		1,864

# Project Budget Form Back SECTION 1 CONTINUED

# MATERIALS, SUPPLIES, AND EQUIPMENT

ITEM Server memory&storage	BASIS/METHOD OF COST CO PC with additional	MPUTATION IMLS disk storage 2,600	MATCH 2,600	5,200
TOTAL COST OF MATE	ERIAL, SUPPLIES, & EQ	JIPMENTS 2,600	2,600	5,200
SERVICES				
ITEM N/A	Basis/METHOD OF COST CO	MPUTATION IMLS	Матсн	TOTAL
	TOTAL SER	VICES 5		
OTHER				
ITEM Student Support	Basis/Method of Cost Con 20 Students(2 cours <del>-@\$170/hr)</del>	APUTATION IMLS 13,260	Матсн 7,140	TOTAL 20,400
	TOTAL COST OF	OTHER \$3,260	7,140	20,400
1	TOTAL DIRECT PROJECT	COSTS <u>\$47,167</u>	34,731	81,898
Applicant is using  A. an indirect cost rate w  or	d complete C. (see page 5.2 shich does not exceed 20% o	f direct costs	ect costs)	
Name of Federal Agency	Effective D	ate of Agreement		
C. Rate base(s) Amount		-		ount 5,340
nclude all information for each partner of	claiming indirect costs	TOTAL INDIRECT	COSTS \$ 15	5,340

# Project Budget Form Front SECTION 1: DETAILED BUDGET Year 2 (IF APPLICABLE)

Name of Applicant The Curators of the University of Missouri School of Information Science and Learning Technologies Bryce Allen, Principal Investigator IMPORTANT! READ INSTRUCTIONS ON PAGE 5.2 BEFORE PROCEEDING.

### SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	No. Me	THOD OF COST C	COMPUTATION	IMLS	Матон	TOTAL.
						-
	2.1					,
	TOTAL	SALARIES A	ND WAGES	<b>s</b> 13,475	16,275	29,750
SALARIES AND WA	GES (TEMPOR	ARY STAFF	IIRED FOR P	ROJECT)		
Name/Trile	No. Men	HOD OF COST CO	OMPUTATION	IMLS	Матсн	TOTAL
Computer Technic	ian (1) 50%	of 12 mont	h appt.	5,460	5,460	10,920
Grad Res Assista	nt ( ) 25%	of 9 month	appt.	4,595		4,595
						15.515
	TOTAL S	ALARIES AI	ND WAGES	<b>\$</b> 10,055	5,460	15,515
FRINGE BENEFITS						
RATE	SA	ALARY BASE		IMLS	Матон	TOTAL
	701	AL FRINGE	BENEFITS	<b>5</b> 7,342	4,505	11,847
CONSULTANT FEES						
	RATE OF	COMPENSATION N	Io. of Days (or			
NAME/TYPE OF CONST	JLTANT (D	ALLY OR HOURLY)	Has) ON PROJECT	IMLS	MATCH	TOTAL
N/A						-
To the state of th		e de la company		20 2002		West 1 - 1 C
	TOTAL	CONSULTA	TION FEES	5		
TRAVEL	<b>~</b> 00000.0000	* 10.00 to 1	_			
NUMBER OF: SUBSISTENCE TRANSPORTATION				Manne	Tomas	
	RSONS DAYS	Costs	Costs	IMLS	MATCH	TOTAL
Columbia/StLouis Columbia/KC,MO	$\frac{(2)}{(2)}\frac{(2)}{(2)}$	560 560	372 372	932 932		932 932
		TOTAL TRA	VEL COSTS	1,864		1,864

# Project Budget Form Back SECTION 1: CONTINUED

# MATERIALS, SUPPLIES, AND EQUIPMENT

ITEM Server memory&storage	Basis/Method of Cost Computation Additional hard disk drives	IMLS 2,600	Match 2,600	TOTAL 5,200
TOTAL COST OF MATER	IAL, SUPPLIES, & EQUIPMENT	<b>\$</b> 2,600	2,600	5,200
SERVICES				
ITEM N/A	BASIS/METHOD OF COST COMPUTATION	IMLS	Матсн	TOTAL
OTHER	TOTAL SERVICES	<u>\$</u>		
ITEM Student Support	Basis/Method of Cost Computation 20 Students (2courses@3hrs @176/hr)	IMLS 13,728	MATCH 7,392	TOTAL 21,120
	TOTAL COST OF OTHER	<b>\$</b> 13,728	7,392	21,120
T (	OTAL DIRECT PROJECT COSTS	\$ 49,064	36,232	85,296

## INDIRECT COSTS

Select either item A or B and complete C. (see page 5.2 for an explanation of indirect costs)

Applicant is using

A. an indirect cost rate which does not exceed 20% of direct costs

■ B. an indirect cost rate negotiated with a Federal agency (copy attached)

Name of Federal Agency	Effective Date of Agreement	
C. Rate base(s) Amount(s)		Amount \$ 16,040
and admittable in the service of particles.		

include all information for each partner claiming indirect costs

# Project Budget Form SECTION 2: SUMMARY BUDGET

Name of Applicant

The Curators of the University of Missouri
School of Information Science & Learning Technologies

IMPORTANT! READ INSTACTIONS BY PATES IPAL JEVESTEBLES.

DIRECT COSTS		IMLS	Мутсы			
TOTAL						
	SALARIES AND WAGES	45,939	42,435		88,374	_
	Fringe Benefits	14,376	8,796		23,172	_
	Consultant Fees		_			_
	Travel	3,728	_		3,728	_
	SUPPLIES & MATERIALS	5,200	5,200		10,400	_
	Services					_
	OTHER	26,988	14,532	_	41,520	-
TOTAL DIRECT COSTS		<b>s</b> 96,231	<b>s</b> 70,963	\$	167,194	_
INDIRECT COSTS		<u>s</u> 31,380	<b>s</b> 25,103	<u>\$</u>	56,483	-
					223,677	
		101	IAL PROJECT COSTS	5	223,077	-
AMOUNT OF CASH—	MATCH		<b>\$</b> 96,066			
AMOUNT OF IN-KIND CONTRIBUTIONS						
TOTAL AMOUNT OF	COST SHARING (C	ASH AND IN-KI	ND CONTRIBUTIONS)	<u>\$</u>	96,066	-
AMOUNT REQUESTED FROM IMLS					127,611	
PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50% IF REQUEST IS ABOVE \$250,000)					.57 • <sub>9</sub>	•
			<u> </u>			
Have you received or re Federal agency? (please		of these project ac	ctivities from another			
rederal agency: (piease	careae one;	103	- (10)			
If yes, name of agency Amount requested	<u> </u>		_ Date		<del>-</del>	-
requested					_	

# The Public Services Librarian in the Electronic Age: An Education and Training Proposal

## **Budget Narrative**

#### A. Personnel Costs

Faculty members at the University of Missouri typically teach 4 courses per academic year. With the additional responsibilities of developing a new course, it is appropriate for each faculty member to be given release time from one of those four courses. This explains the 25% (academic year basis) salary line for two faculty members in the budget. Figures are actual salaries, with reasonable assumptions made for merit and other salary increases over the course of the period covered by the grant.

Administrative support for this grant is represented by the administrative clerk's salary. Here the salary was calculated by assuming that approximately 3.5 hours per week (10% of this employee's work) would be required to manage the expenditure of the grant funds for the entire period of the grant.

A Graduate Research Assistant has been added to the budget to ensure that faculty members engaged in course development and teaching will have adequate assistance in these tasks, and to provide an opportunity for a graduate student to be actively engaged in the development and teaching of these courses. A full tuition waiver for the academic year for this GRA is listed in the fringe benefits. An HTML technician will be required to mount and maintain the web-based courses.

This salary figure was obtained by assuming a \$ 1 0 per hour salary, and approximately 20 hours per week over the year. It is, of course, understood that there will be periods of intensive activity while the courses are being mounted on the web, followed by periods of less intensive work required to maintain and edit the course content. This variability in the workload is the main consideration in hiring an employee paid on an hourly basis to do this work.

## B: Travel

The travel lines reflect consultation with members of the professional staff of the St. Louis Public Library and the Kansas City public library. It is anticipated that there will be two trips to each location in each of the years of the project. In the initial course development stage, these trips will focus on gathering input from professionals about the training program. As the project moves towards its completion, these trips will also involve meeting with students to obtain evaluative feedback, and with librarians to develop the evaluation tools that will assess the impact of the training program.

## C: Equipment

The equipment budget is modest, but reflects the reality that web servers frequently encounter storage and memory limitations. With a substantial addition of course content, existing web servers will need additional storage space. With a substantial increment in students using the web server to obtain instruction, memory will need to be increased to ensure appropriate levels of response time. Based on the School's experience in running a large number of web sites, we believe that these modest budget amounts reflect the actual incremental costs that can be associated with this project.

# D: Other (Student Support)

Student support is a vital element of this project. The first students to enroll in the two LIS courses will have an important testing and assessment function. In a sense, they are co-designers of the content and presentation of the course. Accordingly, we have budgeted for a tuition incentive that will encourage students to enroll in these new courses. In the second year of the grant, this budget line represents an incentive to both professional librarians and their employers to participate in the continuing education component of the program. While it is anticipated that there will be inherent demand for the contents of these courses, our experience has shown that new continuing education programs typically must establish a reputation within the professional community before they can become self-sustaining. Accordingly, we have budgeted for incentive funds to bring the first professional librarians (and their employers) into this educational experience.